NPS Come of Age:
A UK overview

DrugWise

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Summary

- All the available official data indicates that in general terms, albeit with some recent blips and changing patterns of use, non-medical drug use in the UK has been in decline since the start of this century.

- However, from around 2006, there has been a growing interest in, and availability of, a new generation of drugs collectively known as Novel Psychoactive Substances (NPS) or more colloquially, 'legal highs' and less frequently 'research chemicals.'

- The arrival of NPS has been something of a 'game-changer' in that traditional models of drug diffusion and supply (e.g. for heroin or cocaine) have been joined by the internet as a new route of wholesale and retail supply, distribution and information exchange.

- From 2006 until 2016, many of these substances have been legally available on the high street, both from 'head shops' and a range of other retail outlets such as petrol stations and fast food outlets. However, the Psychoactive Substances Act which came into effect on 26th May 2016, bans the manufacture, sale and distribution of any and all psychoactive substances accompanied by a list of exemptions including tobacco and alcohol.

- The citing of NPS patterns and prevalence of use in official datasets remains patchy, not least because those groups most affected are least likely to be identified by official surveys like the Crime Survey for England and Wales. But from what exists plus a growing body of anecdotal evidence and unofficial reporting – a picture is emerging of NPS use in the UK in 2016.

- That picture is not dissimilar to the emergence of crack cocaine in the UK: much sensational media reporting and dire predictions for the future, but ultimately finding a level in the drug scene with regular use primarily concentrated among those with existing serious drug problems and other vulnerable groups.

- The main group of drugs are the synthetic cannabinoid receptor agonists (SCRAs) which are currently presenting serious problems in prisons and young offender institutions, among the homeless and existing service users.

- Still thought of as an NPS, mephedrone is the other main source of problems across a range of user cohorts, from young people, to those on the 'chem sex' party scene, through to traditional service clients.

- Relatively few people are coming forward to treatment services in the community citing an NPS as their primary drug problem in 2016. Workers see more of the problem out in the community with clients who are not accessing treatment, for example homeless and rough sleepers.

- While NPS have been mentioned in a number of fatalities, very few deaths appear to have been as a direct result of taking an NPS in isolation.

- The issue of providing up to date and credible information in such a new and rapidly developing scenario is problematic – and there is a danger of over-reacting to the situation. For drugs workers, the key message is to 'deal with the problem in front of you' rather than being overly concerned about the substance that is alleged to have been taken. Useful clinical guidance has been published under the auspices of Project Neptune with more targeted care bundles to come.

A note on definitions and terminology

The Advisory Council on the Misuse of Drugs (ACMD) defines NPS as "psychoactive drugs which are not prohibited by the United Nations Single Convention on Narcotic Drugs or by the Misuse of Drugs Act 1971 and which people in the UK are seeking for intoxicant use". [1]

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has adopted a similar definition[2] but from an international perspective this still leaves a number of substances which are controlled in the UK, but outside of the international control mechanisms. This explains why in some international reports, drugs such as ketamine and GHB/GBL can be classed as NPS.

In March 2015, the EMCDDA published an update on the NPS situation in Europe. The report divides the NPS market into several categories:

1. Legal Highs – aimed at recreational users, sold openly in head shops and online.
2. Research chemicals – advertised as intended for scientific research, sold openly online.
3. Food supplements – targeted at people looking to enhance their body or mind, sold openly online.
4. Designer drugs – produced in illegal laboratories, falsely sold as illicit drugs such as MDMA and heroin.
5. Medicines – diverted from patients or illegally imported and sold on the illicit drug market.[3]

The International Narcotics Control Board (INCB) Annual Report for 2012[4] acknowledged a broader perspective when it stated that the definition ''also includes substances that are not necessarily new, but which have recently been increasingly abused".

NPS are defined in this report as those substances which have come to public attention since around 2008 as substances deliberately 'designed' to mimic the effects of controlled drugs while at the same time 'designed' to be outside the scope of the Misuse of Drugs Act.[5]

1 ACMD (2011) *Considerations of the novel psychoactive substances.* Home Office

2 EMCDDA (2011) *Responding to new psychoactive substances.* Drugs in Focus Briefing

3 http://www.emcdda.eu/publications/2015/new-psychoactive-substances

4 INCB (2013) *Annual report 2012*

5 Part of the reason why the term 'legal highs' is misleading is that sample packets of, for example, synthetic cannabinoids, are often found to contain some controlled compounds.

The road to NPS

From a time of significant increases in drug use in the UK through the 1980s and 1990s, the general picture since 2000 has been one of stabilisation and decline across all the main drugs from heroin to cannabis.

However the period since 2008-2009 saw a significant increase at least in interest and probable use of a new breed of drugs. The genesis of this development in the UK can probably be traced back to the increasing control of precursor chemicals under the 1988 UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. During the 1990s so-called 'herbal highs' came onto the market, promoted as a more 'natural' route to intoxication and including psychoactive (often psychedelic-like) plants such as salvia and morning glory and more indeterminate products such as 'herbal ecstasy'.

If there was a tipping point for the exponential growth of NPS, it would arguably be the global sale of Benzylpiperazines (BZP) from a base in New Zealand. The 1990s saw a heroin drought in the region caused by the eradication of much of the opium growing capacity in Thailand. However, this was quickly replaced by methamphetamine labs, causing significant problems in Australia and New Zealand. BZP's stimulant properties were promoted as a safer alternative to methamphetamine – which they were. The market place opportunities provided by the burgeoning internet allowed the supplier to easily fulfil the orders that started coming in from across the world. In the UK, BZP was promoted as a safe alternative to MDMA – which it wasn't.

The growth of the internet was another vital step along the way to the manufacture and sale of NPS. It allowed for:

- A global information exchange between users about the drugs and their effects.
- The search for patents by those looking for compounds which had been the subject of experimentation by pharmaceutical companies, but since discarded.
- The wholesale ordering and dispatch of both the raw chemicals and finished product usually from the Far East, using encryption technology.
- Retail ordering and dispatch from globally dispersed websites using payments through third parties such as PayPal.
- The development of a so-called 'Dark Web' in which resided such operations as Silk Road (and subsequently many similar sites) and which demands a higher level of technical knowledge to access, and the use of virtual currency such as the bitcoin.

The Drugs

As an introduction to this section, it is worth pointing out that a lot of dust has been kicked up about the number of new substances that have been identified both across the EU and more widely. Of course, there was a time when months if not years would go by between the arrival of new drugs on the scene with a profile sufficient for governments to invoke drug controls. That has clearly changed. Even so, the way these statistics are presented, anybody could be forgiven for thinking that each new compound is as different from the next as heroin is from cocaine. In fact, they can be grouped into a few main categories as detailed below – and moreover many of the new compounds are simply variants of synthetic cannabinoids. The point is important because certainly among front line professionals, there is a sense of bewilderment at what is going on and much anxiety about appropriate responses. Some of the problems posed by NPS are challenging enough without over cooking the numbers game.

The UK has two key agencies engaged in the testing of NPS whose findings are publicly available:

The Home Office Forensic Early Warning System (FEWS)

FEWS was set up in 2011 to identify NPS more promptly and to pass that information to various government agencies including the ACMD and to report any new substances to the EMCDDA Early Warning System.

FEWS collects samples from a number of sources, but for 2014/15, these were primarily festivals. In its fourth Annual Report published in September 2015, FEWS stated that only 4 previously unseen substances were identified, down from 17 in 2011, while only 8% of samples contained controlled drugs, down from nearly 20% in 2013/14.[6] It would be wrong to make too much of these figures, but it could be that the NPS market is somehow 'settling down'.

Welsh Emerging Drugs and Identification of Novel Substances Project (WEDINOS)

This project was launched in September 2013 and offers a testing service for all drugs, not just NPS and is available to agencies and individuals alike. Results are posted on the WEDINOS website.

Just considering the NPS results from its 2014-15 Annual Report[7]

"The most commonly identified NPS groups are SCRAs and cathinones. Of the ten most commonly identified NPS profiled by WEDINOS in the last year, three are SCRAs and two are cathinones...During the latter half of 2014 an increase in samples submitted and analysed that were found to contain either the tryptamine 5-MeO-DALT or the stimulant ethylphenidate was noted. Of the NPS samples that were purchased as branded products, 46 per cent contained at least two substances, down from 80 per cent in 2013/14 and 11 per cent contained at least three down from 54 per cent. Four samples were found to contain four substances and one a total of five substances each."

6 https://www.gov.uk/government/publications/forensic-early-warning-system-fews-annual-report

7 WEDINOS: http://www.wedinos.org/

The project noted a trend in the decline in samples of a particular compound being submitted once it had been controlled and suggested from that:

"These trends in the reduction in submission of a substance following a legislative control measure may suggest that legislation has an effect on drug markets and choices. However, it appears that this is only the case in substances that were previously licit at the time of project launch (October 2013); as cocaine, MDMA and diazepam can be found in the top ten most identified substances...and mephedrone and ethylone are amongst the top ten NPS.... It may therefore, be more indicative of the population using WEDINOS, with these individuals looking to consume psychoactive substances as safely as possible utilising a harm reduction provision such as WEDINOS, whilst also looking to remain within current legislation."

NPS Drug Groups

NPS can be sub-divided into the following:

Synthetic cannabinoids (SCRAs)

SCRAs are smoking mixtures combining (usually) inert herbs plus chemicals. They look like natural cannabis, but high potency varieties can be dyed in bright colours. Product names include, Spice (the original generic name for these substances, but not to be confused with high THC natural cannabis of the same name), Annihilation, Happy Joker, Exodus Damnation, Kronic, Black Mamba, Psyclone, Blue Cheese and many others.

The EMCDDA has identified seven main structural groups including AMxxx; HUxxx; JWHxxx; HUxxx, CPxxx with many sub-variants under each group which is why control has been so problematic.[8] Most of these compounds were discovered by underground chemists in the published scientific literature.

8 http://www.emcdda.europa.eu/publications/drug-profiles/synthetic-cannabinoids

JWH are the initials of John William Huffman, an American professor of inorganic chemistry and arguably the unwitting Albert Hoffman of SCRAs, who was trying to identify a drug that would target the brain's natural cannabinoid receptors to aid research into HIV/AIDS, chemotherapy and MS. The compounds leaked out in Germany as K2 and Spice around 2008 where the first street use of SCRAs was identified. But some compounds identified more recently are not in the literature at all which suggests chemists are examining legislation and working round it.

THC is a partial agonist which means it doesn't fully engage with the brain receptors CB1 and CB2 (probably because of the presence of CBD which is the naturally occurring 'antidote' to THC found in the plant). However, some SRCAs are shown to be full agonists which makes them potentially much more potent than THC. Huffman also investigated retail SCRAs and discovered that JWH-018 binds to the CB1 receptor four times tighter than THC and ten times tighter to CB2. If you think of the SCRA as the key in the lock (the brain receptor), smoking average potency cannabis and an SCRA is the difference between turning a key in a lock and kicking the door in. Huffman's response to the recreational use of SCRAs? "We had no idea that anybody would be stupid enough to use it."[9]

Stimulant-type drugs

These include BZP, mephedrone, MPDV, NRG-1, Benzo Fury, MDAI and ethylphenidate. The effects of these drugs replicate across the range, those effects encountered with amphetamine and MDMA.

BZP mentioned above was one of the first NPS to arrive in the UK and was eventually controlled in December 2009. But of the other NPS in this category, mephedrone has had the biggest impact. Mephedrone is in the family of drugs known as cathinones – the basic substance occurring naturally in khat.

Mephedrone was first synthesised in 1929, but like so many compounds was just left on the shelf when no viable commercial uses could be determined. The drug was rediscovered in 2003 by an underground chemist based in Israel who went by the name Kinetic. A cathinone drug appeared there called hagigat in 2004 and when this was banned, a new variant appeared as Neodove pills produced by a company called Neorganics until the Israeli government banned mephedrone in 2008.

About the same time, the market opened up for mephedrone in the UK. A substantial seizure of safrole, the main precursor chemical in the primary source country Cambodia (enough to make nearly 250 million pills) caused an MDMA drought in western Europe. Seizures fell by 25% while forensic laboratories in both the UK and Holland saw a significant decline in MDMA purity. For reasons that are less clear, there was also a decline in cocaine purity, although as drug trafficking is a cash business, this may have been partly due to the reduced spending power of sterling against other major currencies following the global financial crisis of 2008. But whatever the reason, existing users were now seeking out a stimulant drug whose purity was more assured.

9 http://cen.acs.org/articles/88/i26/John-W-Huffman.html?type=paidArticleContent

However, the overriding reason mephedrone took off in the UK was that it was legal. This introduced a whole new group of people not just to experimenting with the drug, but also to the chance of extra money by selling it.

It has never been established how many people were using mephedrone while it was legal, but by the time it was controlled in the summer of 2010, it was among the top five popular illegal drugs in the UK which suggests that substantial numbers had at least tried it. This was unprecedented in the history of UK drug use; up to then most of the drugs which became ubiquitous on the drug scene like heroin, cocaine, cannabis and MDMA had been controlled long before they became popular.

As a consequence, mephedrone regularly featured as headline news stories during 2009. The drug was dubbed 'meow, meow', although it is rumoured this was made up by a journalist who happened to see a reference to MCat (a shortened version of the full chemical name) on one of the drug-related internet chat forums. Several unsubstantiated deaths were attributed to mephedrone including most infamously, the deaths of two teenagers which were actually caused by a combination of alcohol and methadone. The government were accused in some quarters of not acting quickly enough to ban the drug and then when they did, others accused them of a knee jerk reaction. Once the drug was controlled, overall use appeared to fall, but some of those who continued using began to build up problems for themselves.

As an aside, it is probably no coincidence that once MDMA supply was back onstream, some of the strongest pills and powders ever tested were finding their way onto the streets. Moreover, in the meantime, chemists had switched to a different precursor for MDMA manufacture and in doing so introduced the more toxic PMA/PMMA into the pills causing clusters of deaths across the UK.

Hallucinogenic-type drugs

These include i25i-NBOMe, Bromo-Dragonfly and the more ketamine-like methoxyetamine.

Opiate- type drugs

There are some opiate type NPS in Europe such as kratom, but no evidence of a significant UK presence, although there was a reported UK death caused by a synthetic morphine product called AH-79217. O-desmethyl tramadol, an opioid analgesic (and the main active metabolite of tramadol) has been offered for sale, but now controlled. W 15 7 and W 19, both potent μ-opioid agonists, have also been seen.

Tranquilliser-type drugs

The main type found in the UK is a thienodiazepine related to benozdiazepine called etizolam. Similar drugs in this group include brotizolam and clotiazepam which unlike etizolam, are both controlled under the Misuse of Drugs Act. None are licensed as medicines in the UK.

Prevalence and patterns of use

Trying to ascertain the extent of NPS use in the UK remains as problematic as ever. The main indicator of drug use in the general population for England and Wales, the Crime Survey, does not include several groups who might be expected to be more regular users of drugs than the general population. These include students in student accommodation, adult prisoners and young offenders and the homeless.

Other data relies on self-reporting and self-selecting surveys conducted among people, again with a higher level of drug use than might be expected in the general population, such as those attending festivals and clubs.

Looked at from another angle, it is unlikely that most NPS users can be certain what it is they have taken, although this is not an unusual state of affairs on the illicit drug market. Substances rapidly appear and disappear, marked in a range of packaging under a multitude of brands. There are examples of identical packets on sale in the same retail outlet but when tested found to have different chemical compositions. WEDINOS reported that *"between project launch and September 2015 WEDINOS has profiled 32 SCRAs. Commonly these substances are profiled as a combination of SCRAs with up to six being profiled in a single product (Chronic Haze)".* [10]

It is always going to be a challenge for official surveys to capture the landscape for all, but the very few drugs that gain any real traction in the UK.

Crime Survey for England and Wales 2014/15 (CSEW) [11]
Only in this most recent survey were there questions devoted to NPS use, although previous surveys had logged use of mephedrone and other substances like GHB/GBL which at the time were not really NPS even though they weren't controlled. There is no attempt to try and identify specific substances, instead there are general references to 'herbal smoking mixtures' (and) 'powders, crystals, tablets and pills' leaving the question open as to whether or not people actually knew what they were using.

Nearly a million people (937,000) aged 16-59 said they had used an NPS at least once, but not surprisingly recent use was mainly males in the 16-24 age group who also used at least one other illegal drug, consumed alcohol and to some extent were engaged with the night time economy. All of which suggests that regular users of NPS are not a discrete section of the drug using community, but may simply have added NPS to their existing repertoire of substances.

The last available school survey of 11-15 year olds - *Smoking, drinking and drug use among young people in England 2014* [12] asked only about mephedrone, but no other NPS. There was no survey for 2015 due to funding difficulties, but one is promised for 2016.

10 WEDINOS, ibid p.

11 https://www.gov.uk/government/collections/drug-misuse-declared

12 http://www.hscic.gov.uk/catalogue/PUB17879

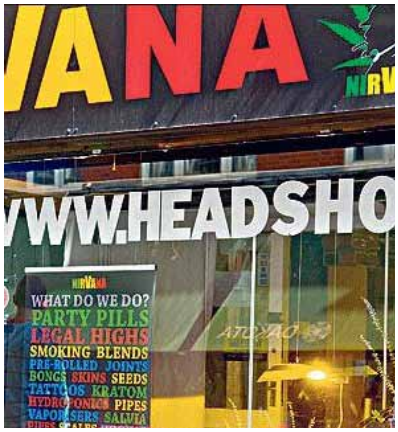
Scotland

In Scotland, the 2012/13 Scottish Crime and Justice Survey reported that 0.5% of all adults had tried any NPS in the last year. Mephedrone was the most commonly taken NPS, tried by 0.4% of all respondents in the last year. This compares with 1.7% for cocaine and 1.3% for ecstasy. Cannabis is still the most commonly used illicit drug in Scotland, taken by 5.1% of all adults in the last year.[13]

In Scotland, the 2012/13 Scottish Crime and Justice Survey reported that 2.1% of those aged 16-24 had used any NPS in the last year and last year use of mephedrone (the most commonly used NPS) amongst 16 to 24 year olds was 1.6% . The Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) (Scottish Government, 2011) found that the use of any NPS by 13 and 15 year olds was uncommon (<1%) and 2% of 15 year olds said they had used mephedrone in the last year.

Europe

The European Union conducts a drug survey of around 13,000 15-24 year olds and for 2014, 90% of UK respondents said they had never tried an NPS. However, most EU countries had even higher percentages of non-use and the UK had the highest rate of increase between 2011-2014.[14]



The Global Drug Survey is a self-reported online survey which in 2015 attracted over 80,000 respondents from 17 countries.[15] They are mainly people who are regular recreational drug users on the club and festival scene. There isn't much in the way of prevalence data in GDS, which is understandable as this is not meant to be a general population survey. It reveals that 8.6% of UK respondents say they have tried a 'research chemical' which is still at the higher end for all the countries represented. Only Sweden and the Netherlands (with their very contrasting drug policies) are higher (9%) with Poland soaring away at 31%.

So what can one conclude so far about NPS use in the general population? Clearly these substances have a presence with significant numbers at least trying once and with SCRAs as those most likely to be tried. But even among regular drug users, NPS do not appear to have found favour. Cannabis, cocaine and ecstasy remain the drugs of choice.

Geographically, the 2013 and 2014 DrugScope street drug surveys, and subsequent anecdotal information from network meetings, indicates that the North East is experiencing particularly high levels of interest/ involvement in NPS, not least because it is in this region where NPS were more likely to be found on sale in ordinary high street retail outlets, such as newsagents or petrol stations, not just 'head shops'. This was confirmed by the Angelus Foundation in its evidence to the Home Affairs Select Committee (HASC) NPS inquiry[16] and by Simon Bray, the Metropolitan Police NPS lead who stated that the government's best estimate was a figure of 355 UK head shops with a further 100 UK-based websites.[17]

13 http://www.scotpho.org.uk/behaviour/drugs/data/availability-and-prevalence
14 http://ec.europa.eu/public_opinion/archives/flash_arch_404_391_en.htm
15 http://www.globaldrugsurvey.com/the-global-drug-survey-2015-findings/
16 http://www.parliament.uk/business/committees/committees-a-z/commons-select/home-affairs-committee/inquiries/parliament-2015/psychoactive-substances/
17 Presentation to Addaction NPS conference April 2016

As a generalisation and from all available evidence, it would appear that NPS use is most problematic in communities experiencing higher levels of poverty and deprivation and, where young people are involved, among those who in years gone past would have been involved in solvent use and heroin smoking.

NPS and prisons

However, most public attention has focused on the situation in prisons where these drugs have been linked with increasing levels of violence between prisoners and against staff, debt, intimidation, self-harm and general psychotic behaviour. There are reports of vulnerable inmates being forced to take SCRAs just for the entertainment of others while the drugs have been coming into prisons by being thrown over the wall, dropped by drones and even soaked into rice paper among several reported methods. The 2014 DrugScope Street Drug Survey interviewed one worker at a prison whose inmates were so used to seeing a fellow inmate taken to hospital as a result of SCRAs they took to calling the ambulance, the "mambulance" (after the Black Mamba brand of synthetic cannabinoid). The ambulance service has reported being overwhelmed by the number of call-outs to prisons while former inmates, prison governors and inspectors variously describe a situation that is out of control.

Two key factors have driven use in custodial settings: firstly, the main substances used have been the SCRAs, many of which remain legal, and secondly, even where they have been controlled, they have been impossible to detect in the process of Mandatory Drug Testing.

There have been several press reports concerning NPS use in prisons[18] and the whole issue was the subject of a thematic report from The Prisons Inspectorate published in December 2015.[19] The review began in 2012, prompted by concerns over the misuse of medicines such as pregabalin and gabapentin, but was extended to cover NPS as the problem grew.[20]

18 'Legal highs smuggled into prisons in letter'. http://www.bbc.co.uk/news/uk-england-birmingham-35989295;
http://www.bbc.co.uk/newsbeat/article/34787158/legal-high-use-in-prison-is-getting-worse-by-the-day;
'Ranby Prison report: legal highs could overwhelm prison'. http://www.bbc.co.uk/news/uk-england-nottinghamshire-35650725

19 https://www.justiceinspectorates.gov.uk/hmiprisons/inspections/?post_type=inspection&month=2015-01&s

20 Presentation at Addaction NPS conference April 2016

Interestingly, the review did not focus on specific responses to NPS, but instead urged prison governors and ministers to take a whole prison approach which covered a wide range of recommendations from consistency of drug treatment across England and Wales through to ensuring that prisoners are engaged in meaningful activity, although they did acknowledge that staff needed specific training regarding SCRAs. Under the Psychoactive Substances Act, the possession offence will be limited to 'custodial institutions' (including staff and visitors) while the Ministry of Justice says that tests for NPS will be available shortly.

Some agencies involved in prison work have responded specifically to the situation; for example in September 2015 Rapt published *Tackling the issue of New Psychoactive Substances in prisons*[21] For staff and prisoners, there is an identifiable need for training and awareness about the risks of using NPS. But like the Prisons Inspectorate report and advice from those doing drug worker training in the community, the Rapt briefing indicates that much of the response will not be that different from the kinds of programmes and facilities – like recovery wings - already in existence for those with the more traditional substance use problems experienced by prisoners.

The Legislative Response

Probably the biggest challenge facing the UK over NPS has been to determine the most effective legislative framework for controlling the supply and distribution of the new substances. The outcome has provoked some of the most heated debate about UK drug law since cannabis was reclassified from Class B to C in 2004.

Misuse of Drugs Act (MDA)

As mentioned above, historically, the time frame between the arrival on the scene of new drugs could be measured in years, allowing plenty of time for the ACMD to consider the risks and the most appropriate legal response. Indeed, until recently, most of the drugs on the UK scene had been controlled even before they were in widespread use: heroin and cocaine (1920); cannabis (1929); LSD (1966) and MDMA (1977) would be some of the more obvious examples.

The initial response to NPS was simply to control each new compound under the MDA. There has always been an element of generic control in the MDA – in other words, the control of a specific compound like LSD and compounds with a similar chemical structure. The scope of generic control was widened with the accidental discovery of MDMA by West Midlands police raiding an amphetamine factory and its subsequent inclusion in the MDA.

21 http://www.rapt.org.uk/content/rapt-research-and-policy-briefings

Temporary Class Drug Orders (TCDO)

The arrival of mephedrone created a new situation; for the first time, a drug that was being widely used and heavily publicised, remained legal for around 12-18 months before it was controlled. But then, following its classification as a Class B drug in 2010, a now familiar cycle was initiated of new (legal) products appearing almost immediately after one was banned. This was unprecedented and it quickly became clear that the mechanisms employed to bring a substance under legislative control were just not nimble enough to cope. In response, the government introduced a system of Temporary Class Drug Orders (TCDO) which penalised supply, but not possession and lasted a year to allow for ACMD deliberations.

However the ACMD in its 2011 report, and subsequently the EMCDDA, both acknowledged that this type of legislation or legislation like the Misuse of Drugs Act was inadequate to deal with the problem and recommended the additional use of other control mechanisms including those covering medicines, consumer and trading standards legislation.

Not for human consumption

So what happened next were various attempts by police and trading standards to use existing legislation to make it fit the purpose of stopping the high street sale of NPS. For some while, traders managed to evade general medicines[22] and consumer legislation by declaring (as the packaging itself often did) that the product was not for human consumption, but rather was to be used as plant food, bath salts, incense and so on. This meant of course, that the more responsible traders were unable to give out any harm reduction advice. Both trading standards and the police claimed they were powerless to do anything about this, but some prosecutions proved that this was not the case. Although, it was all very patchy and sporadic, cases were brought to trial under:

Intoxicating Substances Supply Act 1985

This legislation was brought in to outlaw the sale of sniffable volatile solvents to those aged under 18 where the retailer can reasonably assume that the substance will be misused. This was invoked to bring a prosecution against head shops owners selling NPS to young people. The Act is abolished under the new Psychoactive Substances Act.

Trading Standards legislation

On the face of it, using this type of legislative approach was problematic. Usually it is invoked against those trying to defraud customers. However, in this case, the customer is not being defrauded, s/he is actually colluding with the retailer. Cases brought in various localities around the UK obtained forfeiture orders under General Product Safety Regulations (GPSR) as the prosecution was able to prove that the products were unsafe if used in the way that was intended (i.e. consumed) - you don't go into a head shop to buy plant food or bath salts. The GPSR offered a variety of options for trading standards covering actions against both producers and distributors, seizure of goods pending proceedings, and labelling requirements - hard to comply with when dealing with NPS - as well as forfeiture of stock.

22 The Human Medicines Regulations 2012 (into which the Medicines Act is now subsumed)

Taking another approach, Lincoln City and Lambeth councils enacted a Public Space Protection Order (under the Anti-Social Behaviour, Crime and Policing Act 2014) banning the use of NPS in the city centre.

Seizures and disruption

The Home Affairs Select Committee reported that in November 2013, *"Operation Burdock was launched involving police forces, the National Crime Agency, Border Force, HM Prison Service and trading standards officers who took part in a joint effort to target suppliers of new psychoactive substances. Operation Burdock resulted in 73 warrants being executed and 44 arrests made. Half a kilogram of controlled new psychoactive substances were seized in Huddersfield and Oldham. The Metropolitan Police Service recovered a firearm, £6,000 was recovered from a search in Cumbria and a drugs factory was identified in Hampshire. Police officers across the country visited head shops to highlight to staff and owners that new psychoactive substances cannot be assumed to be safe or legal and that many of these products either contain controlled substances which are illegal, or uncontrolled substances whose side-effects cannot be predicted. A number of head shops handed over the products which they had on sale for analysis, with one shop in Kent handing over nine kilograms as they were unable to prove the origin or content of the products on their shelves. Other shops in Avon and Somerset removed all their products. Information seized from suppliers meant that police officers were also able to make personal visits to 274 people who had purchased new psychoactive substances from online distributors and wrote to a further 574 to warn them of the dangers of using products labelled as 'legal highs.'"*[23]

As a result, some non-head shop retailers refused to stock any more NPS, having been warned that they might unwittingly be selling controlled drugs and once it became clear that new national legislation was being planned, a number of head shops too followed suit and cleared the shelves.

The Home Office NPS Review Panel

However, despite all this enforcement activity, it was still regarded as very hit and miss with the Local Government Association saying that trying to bend existing trading standards legislation to control NPS just wasn't working.

So in the spring of 2014, the then Crime Prevention Minister with responsibility for drugs, Norman Baker, convened an Expert Panel to consider the national legislative options for controlling NPS. Additionally, three sub-groups of the Expert Panel were established to consider issues of treatment, education and prevention and information sharing.

It was never stated overtly why this issue wasn't simply referred to the ACMD. There are two possibilities; firstly the minister was looking for a quick result and it is unlikely that the ACMD would have responded warmly to a tight deadline. Secondly, despite the formation of those sub-groups, this was first and foremost seen as an enforcement issue – so while there were non-enforcement panellists present including the ACMD Chair and other ACMD members - mainly around the table were police, national crime agency, border force, forensic science, Crown Prosecution Service and Local Government Association. And also it could have been argued that this whole process sat outside the Misuse of Drugs Act anyway and so government was not obliged to refer directly to the ACMD.

23 Home Affairs Select Committee ibid

So what were the options considered? As a Liberal Democrat whose party was keen on having a law reform debate, Norman Baker somewhat mischievously told the press after the first day of deliberations that he was totally open-minded and refused to rule out having a legally regulated market in NPS. Cue furious back-tracking by the Home Office.

The legislative options on the table were:

The so-called 'blanket ban' which would aim to prevent the sale of NPS on the high street without a concomitant possession offence. This would be similar to bans imposed in Ireland, Poland and Romania and in effect prevent the sale of all 'psychoactive substances', with specified exclusions such as tobacco, alcohol and caffeine.

The type of generic approach used in the States where substances are banned with a similar effect as a controlled drug (as opposed to having a similar chemistry). This was ruled out on the grounds that lawyers would have a field day arguing over whether or not a substance had the same effect as a controlled drug.

The New Zealand option. For some while, NPS had been on sale in New Zealand in hundreds of so-called dairies, the equivalent of a corner shop in the UK. Although it seems these sales were pretty much under the radar, the government acted to close sales down, leaving only a handful of outlets left. This prompted long queues outside those that remained and so dramatically raised the profile of the whole issue within communities and the media.

The government then passed a law which allowed for a legal market in NPS. The condition was that for manufacturers to obtain a government license, they would have to put up $2m and prove that their product constituted a minimal risk. In the meantime, the government instituted what was in effect a blanket ban save for a handful of SCRAs. This caused more outcry, so the sale of everything was banned and that is how it has remained. The law is still on the statute book, but there appears to be little movement and Matt Bowden, the BZP internet sales innovator, who was expected to be the first to gain a government licence, has gone bankrupt.

And so the Panel opted for the blanket ban, so long as there was no possession offence. For that to happen, the ACMD would still be required to consider new substances for control under the Misuse of Drugs Act. Despite claims that everything was up for grabs, the blanket ban was the most likely outcome. As shown in Ireland and Poland, at the very least, it would stop overt high street sales and so tick a significant political box.

Over all the deliberations, there were two main talking points:

1. The whole point of the blanket ban was that control would not be delayed by lengthy considerations of harm, either actual or potential. The problem which immediately became apparent was that this in effect turned the Misuse of Drugs Act on its head by saying that any substance that was psychoactive was by definition harmful. To some extent, all existing generic

legislation has that element built in, but the blanket ban would take that element much further. Therefore the Panel recommended some kind of 'safety valve' to allow for future substances to be considered for exemption. This did not appear in the Bill and so as it stands, any psychoactive substance not already exempted would be subject to the Act.

2. The second main talking point involved the future control under the MDA of SCRAs. Already two generations of SCRAs had come onto the market (and since the Panel met, a third generation) and it was argued that the only way to prevent successive rounds of deliberations as each iteration emerged would be a neuro-chemical approach whereby any substance locking onto the main cannabis receptors would be controlled. There was much discussion about this, similar to that around the implications of a blanket ban, specifically that such a proposal could for example, sweep up legitimate medicines in the process. The Panel simply recommended that government look into the feasibility of this and at the time of writing, it seems that government will not be taking this forward.

Psychoactive Substances Act 2016

Not since the Labour government reclassified cannabis from Class B to C in 2004, has a piece of drug legislation caused such controversy. As it made its rocky way through Parliament, it was met with a storm of criticism both in mainstream and social media, from drug law reform campaigners, commentators and academics[24] There was general dismay at what was seen as yet another failed tactic in the drugs war. More specifically, there was trenchant criticism at the removal of the notion of relative harms from drug law and scepticism about the legal robustness of any attempt to define 'psychoactivity' – something which had caused problems in the Irish courts. On this point, the Home Affairs Select Committee weighed into the debate recommending that the Sentencing Council be tasked with establishing sentencing guidelines appropriate to the levels of relative harm of different substances. While defensible under the most vague definition of 'psychoactive', the realisation that nitrous oxide would be covered by the ban served to further undermine the Act in the eyes of its critics, but it was decided after review that 'poppers' would be exempt because they are not psychoactive in their action on the body.

Key provisions of the Act – Offences

- producing a psychoactive substance
- supplying or offering to supply
- aggravation of supply (e.g near a school)
- possession with intent to supply
- import/export
- possession in a custodial institution (including visitors and staff)[25]

24 Home Affairs Select Committee ibid
25 The possession offence will apparently not apply in secure mental health facilities

Key provisions of the Act – Actions

- prohibition notices
- prohibition orders
- premises notices
- premises orders
- failure to comply with order or notice
- stop and search
- power to seize

Penalties on conviction range from six months to two years and/or a fine.

Home Office documents relating to the PSA:

Psychoactive Substances Act 2016 - The full description of the Act

NPS Communications Toolkit (PDF) - Possible communication activities for enforcement partners

Circular 004/2016: Psychoactive Substances Act 2016 - More general information about the Act

Psychoactive Substances Act 2016: guidance for retailers

Psychoactive Substances Act: guidance for researchers

The Local Government Association has also produced this **guide on the Act for local authorities.**

Nobody can know for sure what the impact of the Act will be – and it is subject to review after 30 months. But it would be reasonable to expect that:

1. Overt high street sales of NPS will stop, although there is no guarantee that under-the-counter sales in outlets other than head shops would not continue.
2. Sales are likely to move onto the street via for example, mobile food outlets and regular street dealers already trading in controlled drugs – and there is anecdotal evidence that this is already happening.
3. There will be more internet sales either from those buying for themselves or even more likely individuals buying in bulk to sell on the streets.
4. Unable simply to walk into a high street shop, the casual or curious experimenter is likely to be deterred from seeking out alternative supplies.
5. Although we have no baseline figures, it may well be that overall use declines.
6. There are likely to be few court cases. Why? Many outlets have already closed or removed NPS from the shelves. Also there is provision in the Act for escalation through Penalty Notices and Orders and Prohibition Notices and Orders such that those in receipt of these are most likely to have stopped selling before they end up in court. However, there could be some legal challenges over the concept of 'psychoactivity' in an attempt to establish legal precedents.

Health impacts and responses

There is now a growing body of international clinical evidence to demonstrate the potential acute and chronic health harms associated with the use of NPS. *(See Project Neptune guidance below and Appendix Two on further references and reading).*

Key harms associated with NPS use include:

- *Overdose and temporary psychotic states and unpredictable behaviours*
- *Hallucination and vomiting*
- *Confusion leading to aggression and violence*
- *Intense comedown that can cause users to feel suicidal.*

Use was also associated with longer term health issues -

- *Increase in mental health issues including psychosis, paranoia, anxiety, 'psychiatric complications'*
- *Depression*
- *Physical and psychological dependency happening quite rapidly after a relatively short intense period of use (weeks).* Respondents in one UK study revealed former heroin users now switching to SCRAs and experiencing heroin-like withdrawals.[26]

The level of ignorance about dose levels was cited by participants at a DrugScope NPS roundtable in January 2014 and was underlined by an NPS Briefing from the Scottish-based organisation Crew 2000 (February 2014);

"Users often underestimate dosage of the new drugs. Crew asked workshop participants to measure out what dose of a 'legal high' they would take if they had no experience of taking the drug before. On average participants weighed out 250mg (five times higher than what we would expect a medium dose to be of this particular drug)".

One of the most worrying aspect of reported harms comes from drug service providers who report that some clients are injecting mephedrone. A study which investigated mephedrone injecting reported that the effects could be devastating for the users including intense paranoia, violent behaviour, Parkinson's-type tremor and a host of serious health problems associated with injecting a drug sometimes ten or fifteen times a day.

26 Report of a study undertaken in a north-western town (in press)

Drug-related deaths

What constitutes a 'drug-related death'? In its 2012 Focal Point report to the EMCDDA, the authors from Liverpool John Moores University observed that there were at least four definitions operating in the UK; there are three official definitions - the Office of National Statistics, the Drug Misuse Definition and the EMCDDA – and also that delineated by the National Programme on Substance Misuse Data (Np-SAD) – which employs the widest definition of a drug-related death. According to the report, the lack of an agreed definition runs the risk of distorting the true picture, which then shapes policy responses and reduces the credibility of messages about the harms of NPS (for example, the misreporting of mephedrone deaths in 2009-10). While every drug related death is, of course, a tragedy, there have been few deaths to date that have been directly related to NPS – that is, where the pathologist has determined that an NPS has been the only drug present, although NPS have been cited, along with other drugs, on a number of death certificates.

The latest information for England and Wales 2014 (published in September 2015) from the Office of National Statistics (ONS) states:

"The number of deaths involving NPS are low compared with the number of deaths involving heroin/ morphine, other opiates, or cocaine. However, over the past few years there has been an rise in NPS deaths, with 67 deaths registered in 2014 (up from 60 deaths in 2013). Analysis of the trends based on the year the death occurred, reveal a different pattern than that seen for registration year. Analysis of year of occurrence suggests that there were sharp increases in NPS deaths between 2010 and 2011 and again between 2011 and 2012, but then the number of deaths fell in 2013. Although figures for deaths occurring in 2014 are very incomplete, initial indications suggest that the upward trend in NPS deaths has now stabilised". [27]

This is the list of substances that the ONS define as NPS:

• 1-(benzofuran-5-yl)-N-methylpropan-2-amine • 1-(Benzofuran-5-yl)-propan-2-amine • 1-(Benzofuran-6-yl)-propan-2-amine • 2-(1H-Indol-5-yl)-1-methylethylamine • 25B-NBOMe • 25C-NBOMe • 2-diphenylmethylpyrrolidine • 4,4'-DMAR • 4-Fluoroephedrine • 4-Fluoromethcathinone • 4-Methoxymethcathinone • 4-Methylamphetamine • 4-Methylethcathinone • 5-EAPB • 5F-AKB-48 • AH-7921 • Alpha-methyltryptamine • APB • BZP • Cathinone • Desoxypipradrol • Diphenidine • Etizolam • Flubromazepam • Fluoromethamphetamine • Fluoromethcathinone • GHB • Khat • MDDA • Mephedrone • Methiopropamine • Methoxetamine • Methoxphenidine • Methylenedioxypyrovalerone • Methylethcathinone • Methylone • N-Methyl-3-phenyl-norbornan-2-amine • Pyrazolam • Synthetic cannabinoid • TFMPP

27 In 2016, Public Health England published drug related deaths trend data 1999-2014 based on the same ONS data

Scotland

There were 62 deaths in 2014 where one or more NPSs were implicated or potentially contributed to the cause of death. In 40 cases, the only NPSs present were benzodiazepines (usually etizolam); in 17 cases, other types of NPS were present (e.g. mephedrone, MPA); and there were five deaths for which both benzodiazepine NPSs and other types of NPS were present. In only a small proportion of cases (7 out of 62) were NPSs the only substances that were implicated in the deaths. In most cases, 'traditional' drugs (such as heroin and methadone) were also implicated.

Treatment service interventions

There appear to be relatively few people coming forward to drug treatment services who are citing an NPS as a primary substance of concern. Within young people services, the main presenting problems are still cannabis and alcohol. However, DrugScope Street Drug Surveys did find that those working with young people in the community were encountering problems associated with a range of NPS, especially mephedrone and synthetic cannabinoids.

There is little in the way of specific guidance on how to intervene with those who do present with NPS-related problems. That said, those involved in professional training tend to emphasise that staff should deal with the presenting symptoms and issues and not worry too much about the particular substances involved. Bear in mind, too that the whole point of NPS is that they mimic controlled drugs, so in theory the presenting problems should be similar to that which staff have seen before.

Even so, there is a high degree of understandable anxiety across all the professions and disciplines likely to encounter NPS-related incidents, from A&E staff to prison officers. Some individual agencies and authorities have produced NPS guidance, but few of the available materials instruct staff on exactly what to do.

Project Neptune

To begin to address concerns, Dr Owen Bowden-Jones of the London Club Drug Clinic convened an expert group to develop evidence into clinical guidelines or a consensus where evidence is lacking. The end result was a very large document which Dr Bowden-Jones admitted would simply sit on shelves unread. So the team have began to develop 'care bundles to make the information more manageable and targeted at specific groups.

To read more about the project and access the material go to:
http://www.health.org.uk/programmes/shine-2012/projects/novel-psychoactive-treatment-uk-network-neptune

Further information for treatment and health professionals:

One new drug a week: why novel psychoactive substances and club drugs need a different response from UK treatment providers. Faculty of Addictions Psychiatry, Royal college of Psychiatrists, 2014.
http://www.rcpsych.ac.uk/pdf/FR%20AP%2002_Sept2014.pdf

New psychoactive substances: a toolkit for substance misuse commissioners. Public Health England, 2014.
http://www.nta.nhs.uk/uploads/nps-a-toolkit-for-substance-misuse-commissioners.pdf

Public Health Information

The complexities and confusions that swirl around NPS are not only a challenge for front line services and the enforcement agencies. There is also a significant challenge to decide what kind of information to put into the public domain, its timeliness, credibility and targeting – everything from incident-driven police alerts through to drug education in schools. There was some discussion about these issues at the DrugScope roundtable back in January 2014 without any particular conclusions being drawn about either some of the terminology of 'prevention' or what the pros and cons might be of particular interventions and initiatives. The subject of 'what works' in the area of prevention and substance use has generated a substantial and often conflicting literature over many years, so what follows is only a brief overview of a subject that has come back into focus because of the phenomenon of NPS. A recent paper by the ACMD Recovery Committee made the following recommendations:

- Those involved in commissioning prevention work should be mindful that standalone projects will have little impact on substance abuse unless they are considered as part of wider strategies promoting healthy living.

- National policy, and the work of prominent groups such as the ACMD, should be guided by an evidence-based assessment of prevention work. This should consider the long-term effects of programmes which may otherwise be hindered by short-term political, financial and public-opinion pressures.

- Research funders and charities should support high-quality evaluation research in the field, including economic effectiveness. There is currently a poor level of information available.

- Policy-makers should recognise the health and social impacts of drug abuse can be reduced without users abstaining entirely.

- Those working in the field should agree common terminology which will be helpful when considering a complex array of prevention initiatives.

Primary Prevention

This is located very much within the world of drug education in schools; it focusses on stopping children and young people using drugs in the first place. Nowhere is the substance misuse literature more conflicted than that which reports on school-based primary prevention programmes. But a key message from all the studies is that attempts to prevent young people from using substances or significantly changing behaviour of those who have started have been largely unsuccessful. This will set the bar for the value of drug education in schools unrealistically high and may lead to conclusions that conducting such work in schools is a waste of time and money unless other outcomes and benefits are taken into account. A report by the Department for Education looked at the degree to which using information can reduce risky behaviour among young people. It looked at two types of programme; those which imparted consequences of risk ('if you take this, then that might happen') and those which took a social norms approach ('don't think that everybody is using drugs'). The general conclusion of the report was that knowledge and perceptions can be altered/challenged, but that it is difficult to demonstrate behaviour change as a result - and this is reflected in the conclusions of most school-based programmes across the world.

However, raising knowledge and awareness of the risks and consequences should be regarded as a positive outcome. Governments and other agencies should ensure young people have access to timely, accurate and non-judgemental information on which to make informed decisions. It is difficult for a research questionnaire or focus group to capture or assess all the ways in which simple information is internalised by individuals and influences their decisions at one moment in time. And of course, the decision whether or not to experiment/use substances is not dependent on the information/knowledge imparted alone, but a wide constellation of other personal, social, economic and environmental factors which are outside the capacity of any one institution to significantly influence.

There is concern that teachers (and professionals generally) need more access to information about NPS. For teachers, there is already a resource called ADEPIS – a Department for Education funded project involving Mentor UK, Adfam (and formerly DrugScope) providing free resources for schools. For more information see http://mentor-adepis.org/
The Home Office has developed a NPS Resource Pack for informal educators and frontline practitioners to use to prevent drug taking among young people. http://www.gov.uk/government/publications/new-psychoactive-substances-nps-resource-pack.

Harm Reduction

At the other end of the educational/awareness spectrum is the concept of harm reduction. This was originally applied to the community of injecting drug users through the supply of clean needles and syringes and other equipment and opiate substitute prescribing. However, during the rise of MDMA and the rave scene in the 1990s, it quickly became clear that users in this very different world could also reduce some of their risks by some simple measures such as not becoming over-heated and staying moderately hydrated. In more recent times with the emergence of strong MDMA, MDMA/PMMA combinations and NPS, those charities working at festivals and venues have been advising that people divide pills or only take a small dabs of power to try and gauge effects and one charity has been engaged in on-site drug testing as a means of allowing users some insights as to the nature of the drugs they are taking.

Appendix One: Changes to drug legislation

July 2003 - GHB classified as a Class C drug.

January 2004 - Reclassification of cannabis from a Class B to a Class C drug under the Criminal Justice Act 2003.

July 2005 - Raw magic mushrooms classified as a Class A drug. Previously, only prepared (such as dried or stewed) magic mushrooms were classified as Class A drugs.

January 2006 - Ketamine classified as a Class C drug.

January 2007 - Methamphetamine (commonly known as “Crystal Meth”) reclassified from a Class B to a Class A drug.

January 2009 - Reclassification of cannabis from a Class C to a Class B drug.

December 2009 - GBL classified as a Class C drug.

December 2009 - Spice, a synthetic cannabinoid, classified as a Class B drug.

April 2010 - Mephedrone and other cathinone derivatives classified as Class B drugs.

July 2010 - Naphyrone, a stimulant drug closely related to the cathinone family, and often marketed as NRG-1, classified as a Class B drug.

April 2012 - Methoxetamine, a ketamine substitute, is given the first of a new kind of drug control, a Temporary Class Drug Order (TCDO), which bans its sale, but not possession, for up to 12 months while further classification is considered.

November 2012 - Methoxetamine, as well as a new group of synthetic cannabinoids including 'Black Mamba', are classified as Class B drugs.

June 2013 - NBOMe, a related drug to the hallucinogen 2CI, and 'Benzo Fury', a related drug to ecstasy, given TCDOs. July 2013 - Classification of khat, a herbal stimulant, as a Class C drug announced.

June 2014 – Ketamine is reclassified from Class C to Class B in response to concerns about damage to the bladder from long term use. A number of substances are newly classified, including NBOMe and related compounds which are made Class A, and 'Benzo Fury' and related Benzofuran compounds which are Class B. Lisdexamphetamine, used in treatment for ADHD, which is a pro-drug which converts into dexamphetamine in the body, is classified as Class B. Tramadol, an opioid painkiller, is classified as Class C, as are Zaleplon and Zopiclone, which are sedatives similar to the already-classified Zolpidem.

June 2014 – The ACMD recommends expanding the definition of the category of tryptamines, a number of Class A hallucinogenic drugs similar to LSD, to include the drugs AMT and 5-MeO-DALT. The ACMD also recommends the control of the synthetic opiate AH-7921, which mimics the effects of morphine as Class A.

November 2014 – The ACMD recommends controlling two new drugs, 4,4'-DMAR and MT-45, at Class A. 4,4'-DMAR, also known as Serotoni and closely related to the banned drug Aminorex, is a stimulant linked to a number of deaths mostly in Northern Ireland, and MT-45 is a synthetic opioid not currently available in the UK but linked to deaths in Europe and the United States. The ACMD also recommends revising the definition of generic cannabinoid-based drugs to combat the range of "third generation" synthetic cannabinoids which have recently come to market.

March 2015 – The following substances now controlled as Class A drugs under the Misuse of Drugs Act; MT-45 (a synthetic opioid) and 4,4'DMAR, a synthetic stimulant.

June 2015 – TCDO issued for 4-methylmethylphenidate and ethylnaphthidate.

November 2015 – TCDO issued for methiopropamine (MPA).

May 2016 – Psychoactive Substances Act comes into force.

Appendix Two: Selected list of further references and reading

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Appendix Three: Some further information sites

DrugWise

DrugWise's mission follows very much in the tradition of DrugScope, to provide drug information which is topical, evidence-based and non-judgemental – and to promote this through media work, public speaking and lecturing.

Angelus

Angelus aims to help people be better informed about the dangers of 'legal highs', to reduce the harm they cause to young people and their families, and to save lives.

DrugWatch

UK DrugWatch was set up in November 2010 by a group of professionals working in the UK drugs sector. The group was established in light of the lack of useful information around the 2010 heroin drought, the rise of NPS and the subsequent plethora of random, often inaccurate drug alerts/warnings. Click here for publications about the PSA from DrugWatch Forum member Michael Linnell

EMCDDA

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) provides the EU and its Member States with a factual overview of European drug problems and an evidence base to support the drugs debate. It offers policy makers data for drawing up informed drug laws and strategies and helps professionals and practitioners working in the field pinpoint best practice and new areas of research.

Erowid

Erowid is a non-profit educational & harm-reduction resource with over 60 thousand pages of online information about psychoactive drugs, plants and chemicals.

FRANK

FRANK offers information on a wide range of drugs. They have a live chat facility on their website, email support, an SMS number – 82111 and a 24 hour telephone helpline – 0300 123 6600.

Global Drug Survey

Global Drug Survey is an independent research organisation conducting research on global drug trends. They hope that by triangulating data sources, public health organisations will be better equipped to craft optimal public health strategies to improve the health and wellbeing of people who use drugs.

Scottish Drugs Forum

The Scottish Drugs Forum aims to improve the quality, range and effectiveness of service and policy responses to problematic drug use in Scotland.

The Loop

The Loop conducts forensic testing of drugs at UK festivals and nightclubs and provides associated welfare support.

TripSit

TripSit is an international resource with an exhaustive database of new drugs and their effects.

WEDINOS

WEDINOS is a service based in Wales that tests substances to give individual users and others rapid and accurate information to reduce harms.

DrugWise